

ABSTRACT OF THE DISCLOSURE

A potentiometric sensor for nitrogen oxide (NO_x) measurement based on yttria-stabilized zirconia with a zeolite-modified electrode is presented. A potentiometric sensor of the present invention comprises a tube having an interior and an exterior. A cap member comprising yttria-stabilized zirconia closes one end of the tube. The cap member has an interior surface exposed to the interior of the tube where a first electrode is disposed. The first electrode is then covered with a zeolite layer. A second electrode is disposed on the exterior of the cap member.